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Army-Baylor University Graduate Program in Health and Business Administration

Strategic Planning for Cardiac Services

Presented to

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In partial fulfillment of the requirements for
Army-Baylor Graduate Program in Healthcare Administration

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Abstract

On April 19 and 20th 2007, the Cardiac Surgery Consultants Board (CSCB) conducted a site visit at the VAMC, Augusta, Georgia. The June 11, 2007 meeting of the CSCB reviewed the site visit report and determined that quality of care issues are of concern. The report showed that these findings were due to the elevated mortality of the cardiac surgery cases referred to the Eisenhower Medical Center, and ongoing low case volume. In August 2007, a Tiger Team formed between members of DDEAMC and the Augusta VAMC to determine causative factors contributing to the results, and to provide an action plan that would satisfy CSCB requirements. This study consists of a strategic analysis of current operations at both facilities that affect the number of cardiothoracic cases performed at both institutions, and analyzing each factor under a process review.

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Open heart surgery performed on non-VA patients are not monitored by this program, but are entered into the Society of Thoracic Surgeons (STS) database. STS patients are not counted in the total number of CT cases performed within the VA standards for cardiac surgery programs.

Conditions which prompted the study

On April 19 and 20th 2007, the CSCB conducted a site visit at the Augusta VAMC. The Cardiac Surgery Consultants Board is a special advisory team appointed to advise the Undersecretary of Health through the Department of Veterans Affairs Director of Surgical Service on various policy issues concerning the conduct of cardiac surgery in all VA medical centers nation-wide (DePalma and McDonald, 2008). This board makes policy recommendations for in-house cardiac surgical programs regarding specific programmatic requirements to ensure excellent and comprehensive medical care to veterans, as well as providing oversight and guidance to a continuous quality improvement program for cardiac surgery (DePalma and McDonald, 2008). The June 11, 2007 meeting of the CSCB reviewed the site visit report and determined that quality of care issues are of concern. The report showed these findings were due to low case volume (Sako, 2007).²

After review of the report findings, the executive committees from both DDEAMC and the Augusta VAMC decided to form a collaborative team to study the problem of low case volume and recommend measures to ensure enough volume is channeled to DDEAMC CT team to perform the needed number of surgeries to remain in business. The team included surgery department heads from both facilities, both

² The site visit report is designated in writing as a protected review under section 5705 and may be released only as authorized by the issuing agency.

Developing a Strategic Cardiac Services Plan for Dwight D. Eisenhower Army
Medical Center/Augusta Veteran's Administration Medical

Introduction

The Augusta Veteran's Affairs Medical Center (VAMC) and Dwight D. Eisenhower Army Medical Center (DDEAMC) have enjoyed a joint cardiothoracic surgery program since 2004 (D. Eastman, personal communication, August 1, 2007)¹. This program was created as an effort to combine knowledge and sustain competencies in cardiothoracic surgery, and is part of the VA/DoD Joint initiative to maximize resource sharing (U.S. General Accounting Office, March, 2006). This program also provides necessary workload for DDEAMC's Graduate Medical Education (GME) programs (Collaborative working relationship, 2007).

Cardiothoracic surgery cases for each facility are performed at DDEAMC, by DDEAMC board certified cardiothoracic surgeons. Patients referred from the Augusta VAMC are screened at the Augusta VAMC and may include invasive procedures such as cardiac catheterizations. Open heart surgery (OHS) is not performed at the Augusta VAMC.

While OHS is only performed at DDEAMC, the Veterans Affairs (VA) remains involved in the surgical program, which must be maintained according to the Veterans Affairs Handbook number 1102.3 (1999), Criteria and Standards for Cardiac (Open Heart) Surgery Programs. Quality of the program is monitored by the National Surgical Quality Improvement Program (NSQIP), and enforced by the Cardiac Surgery Consultants Board (CSCB). Patient data on VA patients are maintained by the NSQIP through the Continuous Improvement in Cardiac Surgery Program (CICSP).

¹ Dr. Dennis Eastman (COL, USA, MC) is the Department Chief for Cardiothoracic surgery at DDEAMC.

cardiothoracic surgeons, and staff from DDEAMC managed care and cardiology departments. The marketing director for DDEAMC was also a valuable participant.

Statement of the problem

In 2006, the total number of cardiothoracic cases was 74, of which 52 were from the Augusta VA. Only 52 cardiothoracic cases were entered in the Continuous Improvement in Cardiac Surgery Program (CICSP) database for the Augusta VAMC from 1 January 2006 to 31 December 2006. According to the CSCB, 150 cases must be performed per year to be within compliance with the VHA standards (VHA Handbook 1102.3 "Criteria and standards for cardiac open heart surgery programs," dated August 23, 1999). Therefore, for the cardiac surgery program to remain viable, the Augusta VAMC and DDEAMC must take measures to ensure performance of at least 150 cases per year.

Literature Review

A literature review on the prevalence of cardiovascular disease was conducted to establish national, state and local status and trends. An additional review regarding the effect of low case volume on cardiothoracic surgery outcomes was also performed to establish foundational information for the overall strategic plan.

According to the Centers for Disease Control and Prevention (CDC), 12 % of the United States population in 2005, or 25.6 million people have been diagnosed with heart disease (DeFrances CJ, Hall MJ., 2005). Heart disease is the leading cause of hospitalization, with a 4.5 day average length of stay nationally (Pleis, Lethbridge-Cejku, 2005) and 5 day average length of stay in Georgia (Georgia Department of Human Resources, 2007). Cardiovascular disease is the leading cause of death in Georgia, which

has a 13% higher mortality rate than the nation (Georgia Department of Human Resources, 2007). Of importance, the rate was 1.4% higher in Georgian men and 1.3% higher in the Georgian black population. While preventive health efforts have targeted the over 65 population, 1 in 4 people that died of cardiovascular disease during 2005 were under age 65 (Georgia Department of Human Resources, 2007). On a local level, 50% of the deaths in Richmond County Georgia were attributed to cardiovascular disease (Georgia Department of Human Resources, 2007).

A literature review of the effect of low case volume on cardiothoracic surgery outcomes revealed a frequently cited article by Birkmeyer et. al (2002) indicating that lower volume produces higher operative mortality. This study used information from the national Medicare claims database and the Nationwide Inpatient Sample to examine the mortality associated with six different types of cardiovascular procedures. The absolute differences in adjusted mortality rates between very-low-hospitals and very-high-volume hospitals were 2 to 5 percent for repair of a nonruptured abdominal aneurysm and replacement of an aortic or mitral valve, and less than 2 percent for coronary-artery bypass grafting and lower-extremity bypass (Birkmeyer et al, 2002). Wilson, Fisher, Welch, Siewers and Lucas (2007) supported the findings of this study in their analysis of CABG patient outcomes in low-volume versus high-volume hospitals. Their study showed Medicare CABG procedures performed in low-volume hospitals had a higher prevalence in mortality.

While the previous two studies show statistical evidence suggesting a correlation between case volume and outcome, Dr. David Shahian (2004) best summarizes the effect of reporting, comorbidities of patients, and refusal of best outcomes hospitals and

individuals refusing high-risk patients as skewing resultant data. Even so, Dr. Shahian says, “policy makers have advocated volume-based referral strategies as an expedient way of achieving better health care outcomes.” This phenomenon would best explain the foundation of VHA Criteria and standards for cardiac (open heart) surgery programs. Regardless of evidence, it is the standard that VA cardiac surgery programs perform at least 150 cases each year.

Situational Analysis

The situational analysis is accomplished by three separate strategic thinking activities: (1) external environment analysis; (2) internal environmental analysis; and (3) the development or refinement of the organization’s directional strategies (Swayne, L. E., Duncan, W. J., & Ginter, P. M., 2006). These activities will give an overview to form a thorough SWOT (strengths, weaknesses, opportunities and threats) analysis by uncovering crucial elements necessary for inclusion into the overall strategic plan. Completing these three activities will form the basis for strategic options illustrated by strategic thinking maps.

External Environment

Before delving into the individual environmental analyses, a stakeholder analysis was developed. The stakeholder analysis includes those entities that function internally, externally or interface with both. Part of the stakeholder analysis is to systematically identify the organizations, groups and individuals whose future is most closely intertwined, and determine the dependencies that are most critical (Iansiti & Levien,

2004). This analysis will also aid in the marketing strategy of target audience identification.

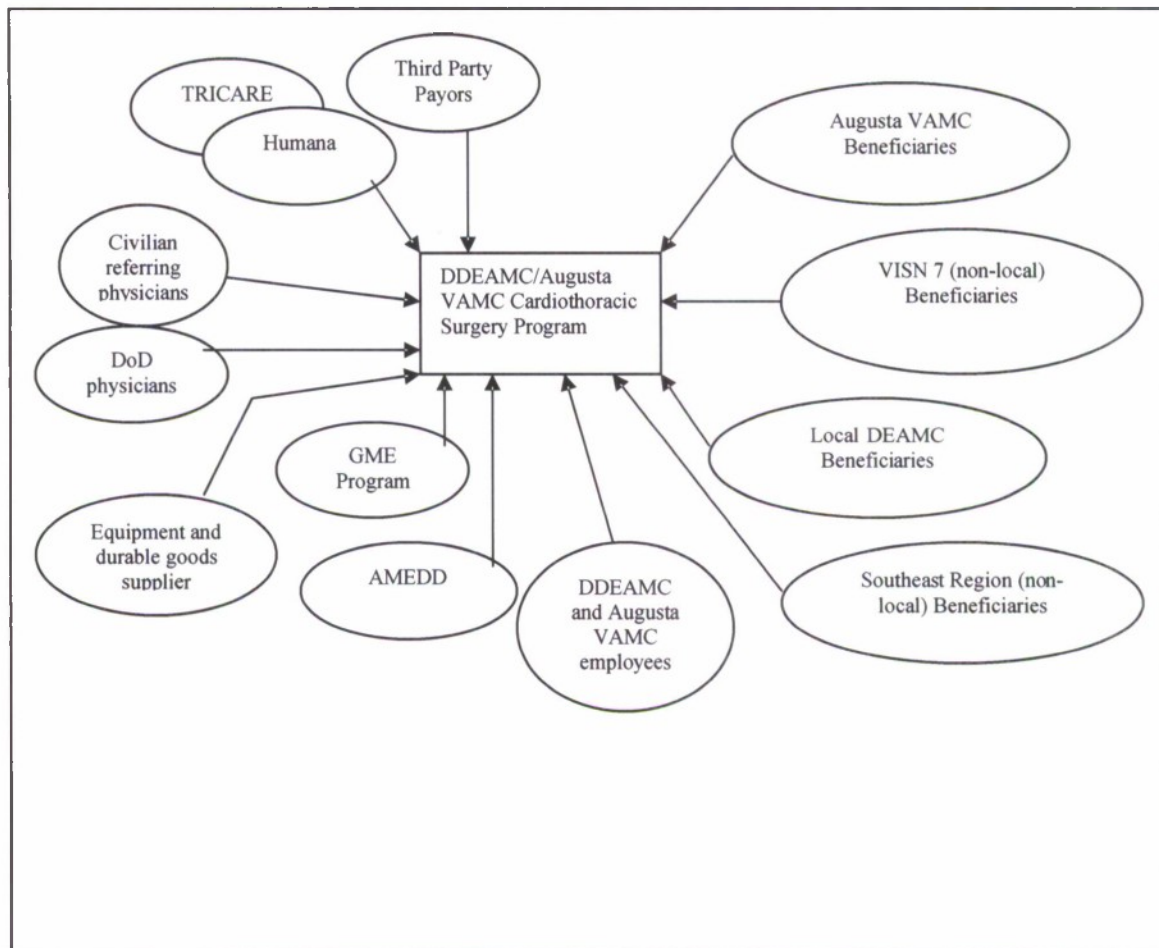
The stakeholder analysis, as shown in *figure 1*, shows a large beneficiary population having influence upon the overall CT program. This influence can be both positive, if a majority of the beneficiaries utilized healthcare at DDEAMC or Augusta VAMC respectively, and negative, if beneficiaries chose civilian care providers. Subgroups of the beneficiaries includes Veteran organizations such as Veterans of Foreign War (VFW), and Retiree Council based on Fort Gordon, GA which have shown to have great influence on the behavior of beneficiaries in the Fort Gordon/Augusta area (Kathleen Haskell, personal communication, 15 August, 2007).³

Additional findings from the stakeholder analysis show civilian referring physicians also greatly influence the CT program. While local civilian physicians have greater influence, those residing in communities in or around Southeast Regional posts are also important. Any non-emergent referral for cardiothoracic surgery to a physician, other than those at DDEAMC is a great loss to the program.

The VA also experiences loss of potential cardiothoracic cases through non-VA physician referrals. Those eligible for care at the VA who does not utilize these services also represent a loss of potential CT cases. Non-utilizers are still represented as a stakeholder since personal economic situations may force them to enroll in the VA's less costly healthcare option.

³ Kathleen Haskell is the Director for Marketing at DDEAMC.

Figure 1. Stakeholder analysis for DDEAMC and Augusta VAMC.



The overall intent of environmental analysis is to assess the position of the organization within its environment (Swayne, L. E., Duncan, W. J., and Ginter, P. M., 2006, p.58). The approach used to analyze these components as suggested by Swayne, Duncan and Ginter (2006), is simple trend identification and extrapolation with a primary focus to monitor, scan, forecast and assess the environment. This tool revealed five categories of interest: demographics, cultural/social, political/administrative/legal, technological, and economic. Findings from each area as applicable to the DoD health system are shown in appendix A (see appendix A).

Demographic data were analyzed by queries from the Tricare database and information reported on the Veteran's Administration website. A Tricare database query on 24 March 2008, showed a total eligible beneficiary population at DDEAMC of 48,625 with only 40,162 enrolled in a Tricare program. Of those not enrolled, 1,993 were active duty dependents and 6,470 were retirees and dependents of retirees. Additional demographic data of interest to this program is the migration of active duty dependents, retirees and retiree dependents to Tricare standard, which showed an increase of 1,822 in 2007 from 2006.

Beneficiary information for Augusta VA was not available. However, according to the Veteran's Affairs (2007), VISN7 serves 1.3 million veterans, and has the lowest decline in veteran population. VISN7 has the ninth largest veteran population, and has the highest percentage increase of the age 65 and over population compared to the remaining VISNs (Veteran's Affairs, 2007).

A scan of the cultural/social data shows customer service, particularly continuity of care, and established relationships as the most relevant immediate environment affectors to the CT program. Beneficiaries having established civilian physician relationships have little incentive to disengage and create a new relationship with military physicians. Continuity of care is highly correlated with patient satisfaction (Saultz and Albedaiwi, 2004). The issue of continuity is of concern to military health care since military physicians are bound to the deployment schedules of the military. Seeing a different physician at each appointment in a military facility has long been a concern to beneficiaries. Monitoring the deployments schedules and forecasting changes in

caregivers should be instituted to assess for continuity. Assessment of patient satisfaction after such measures should then be assessed.

The political, administrative and legal environment scan showed comprehensive marketing campaigns by one of the civilian institutions in the local area to increase their cardiology services. University Hospital launched a major marketing campaign promoting the addition of a dedicated cardiac tower in summer of 2007. This addition is to be completed in 2009, providing the first building with total cardiology care, from first appointment and diagnosis to cardiothoracic surgery and recovery. University Hospital is boasting the new addition through television and radio commercials, print ads and direct mail pamphlets.

The legal environment of Department of Defense health care limits decision-making at the local facility level. Policy changes must be elevated to Health Affairs whether proposed by military institutions or the Veteran's Affairs. Any recommended policy changes that would benefit the local situation would require extensive analysis and a prolonged period. Currently, only memorandums of agreement (MOAs) are an option for affecting policy change at the local level, and are contingent upon yearly review and continuance.

One legal avenue available for monitoring network cardiology referrals is the right of first refusal (ROFR). This mechanism allows DDEAMC physicians to review each case presented for network referral and either accept the case or allow the patient to be seen by a network provider. This option is only applicable to the Tricare prime population.

The economic environment is relatively stable. The military force has been held constant, and BRAC implications are negligible. Beneficiaries enjoy a stable economy in the local area, with the cost of living below the national average. The immediate threat is the effect on the national economy on our immediate area. Employers offering jobs to retirees and family members may be forced to scale down. This could ultimately cause economic hardship on families that have been able to afford the copayments of Tricare Standard or Tricare for Life. This may potentially bring more Tricare Prime patients back into the overall medical system.

The same economic pressures that affect the Tricare beneficiaries can also affect the Veteran population. Veterans utilizing health care offered by their employers may be forced to access the VA medical system if their individual health care options disappear. For this reason, the economic environment should be carefully monitored and addition of new enrollees tracked for both institutions.

Service area competitor analysis

The cardiothoracic surgery program falls under the service category of healthcare delivery within both the MHS and VA healthcare systems. The service area includes the local area of Augusta, GA, the Southeast Regional Medical Command SERMC, and VISN 7 (See Appendix B, *figure 1*, *figure 2* and *figure 3* for area maps).

Elements of the service area profile have already been mentioned in earlier analyses and include demographic, economic and lifestyle information. The demographic make-up of the three areas mentioned has remained relatively stable, with the exception of the deployment/return of troops within the SERMC at Fort Stewart, GA. The Veteran

population has also grown, which include a younger Veteran population (Veterans Affairs, 2006).

The service area structural analysis was completed utilizing Porter's five forces framework. This tool allowed a thorough examination of the competitive nature of the industry (Swayne, Duncan and Ginter, 2006) upon the CT program. Appendix C shows the overall findings which will be individually discussed (see appendix C).

Threat of New Entrants:

The threat of potential entrants into the cardiothoracic surgery market is low. Current programs in the local area are vying for the same population that has resulted in only MCG and University Hospital having the only viable civilian cardiothoracic programs. University Hospital is currently building an entire cardiac tower dedicating 36 universal beds to cardiac patients. Local support has contributed to University Hospital's decision to build the tower and invest in a full spectrum of cardiac care. This follows University Hospital's long history of dedicated cardiac care. Any new entrant would have to compete with University Hospital and the support behind the tower. Although new entrants are unlikely, the recent tower investment by University Hospital may be a threat as it has overwhelmingly marketed to increase awareness and tout the newest in technology within the tower.

On a non-local area analysis, the threat of new entrants is low to already saturated markets. These areas would include major metropolitan areas such as Atlanta, GA, Columbia, SC, Savannah, GA, and Birmingham, AL. Start-ups in smaller communities would unlikely be supported due to a limited target population.

New joint ventures may prove more of a threat than new start-up programs. The cost of joint ventures would be considerably less than a new start-up program and would represent a larger market share. The VA and MHS must look at providing the best care at the least cost to the organization and beneficiary. If either the VA or MHS within the service area chooses ventures with civilian providers that prove cost and care beneficial, existing agreements may be severed.

Threat of Substitute Products:

The threat created by possible substitutes for cardiothoracic surgery is any non-invasive or minimally invasive procedure that can be performed by cardiology services. Non-invasive procedures such as pharmaceutical treatments have become better at treating even the hardest of cardiology patient. New technology that allows non-surgical repair of the mitral valve (Schwartz, 2007) is a direct threat to invasive open heart procedures. In addition, 16-slice computer topography has proven to be a viable non-invasive option for reevaluating prior coronary artery bypass graft patency (Houslay, Lawton, Sengupta, Uren, McKillop, and Newby, 2007).

Pharmaceutical treatment may also be an option over open-heart surgery for the treatment of many cardiology conditions. However, these may only prolong the decision to have a more invasive procedure later (Lamotte, Annemans, Brdigewater, Kendall and Siebert, 2007).

Bargaining Power of Buyers:

The bargaining power of buyers is high for certain groups of beneficiaries. Those enrolled in any Tricare program other than Tricare Prime are given the option of network providers and hospitals. Tricare Prime enrollees are required to utilize designated

providers and give the responsible MTF right for first referral (ROFR) on specialty care that may be referred to the network. Military dependents and retirees have secondary insurance through their employers, which allow them to seek care outside the MHS. It is possible that MHS beneficiaries are never rendered care at the MTF unless they do not have secondary insurance.

VA beneficiaries are bound to VA providers and facilities. VA beneficiaries may also have secondary insurance through their employers, which allow them to be seen outside the VA system for care. Similar to military dependents, many VA beneficiaries may never be seen at the VA unless they are economically challenged and only have such care option available.

Bargaining Power of Suppliers:

The bargaining power of suppliers is low within the MHS and VA systems. Many durable and nondurable supplies have direct competitors that can be easily exchanged for any current item. Purchase agreements are strictly developed under guidelines outside local command, although there may be a small amount of specialty items that warrant individual purchase orders.

Equipment utilized within the CT program was purchased with service agreements with options to extend as needed. Unless the equipment supplier had an unlikely immediate withdrawal from the market, service should not be interrupted.

Intensity of Rivalry:

Rivalry among existing firms is very high. The VA has similar joint sharing programs with civilian providers and hospitals. The CT joint sharing program between the Charleston VA and the University of South Carolina medical school is one such

example that vies for the same VISN 7 population. The Charleston VA has actively recruited CT patients from Columbia, SC VA and is the direct referring institution for the VA health clinic in Savannah, GA. Both these programs directly compete for the same VA beneficiary population as the Augusta VA.

DDEAMC is in direct competition with local civilian hospitals for non-Tricare-Prime beneficiaries. The rivalry will remain high as the overall population of CT candidates diminishes due to better health and non-surgical options.

Overall, the competitive nature of the service area is high. Beneficiaries from both the VA and military have many options, to include civilian healthcare, non or minimally invasive care, or pharmaceutical treatment. The competition from local civilian providers and hospitals has an advantage of local support and the desire to maintain high customer service for continued growth. Competition from the VA includes internal cannibalism of one VAMC from another. This competitive threat will remain high for CT patients as the population becomes healthier and if intervention is needed, non-surgical measures taken first.

Competitor Analysis

Besides the Augusta VAMC, 4 other hospitals are located within a 10 mile area. Two of the largest hospitals, University Hospital and The Medical College of Georgia (MCG) are located downtown, 13 miles from DDEAMC and only one block apart. University Health (a separate entity from MCG) is a 581-bed, not-for-profit community hospital. The are accredited by The Joint Commission, is designated as a Magnet Facility by the American Nurses Credentialing Center, and has been selected for the Consumer

Choice Award 9 years in a row by the National Research Corporation (University Health, 2007).

University Health boasts an extensive cardiology and cardiac surgery program. University Health consumers can peruse their website to read about the hospital having the first cardiac catheterization program in 1974, performing the region's first angioplasty in 1980, and transplanting the first heart in Georgia in 1984 (University Health, 2007). Also mentioned on the website is a historical note from 1994 when University Health was the first hospital in Georgia to use drug-eluting stents. This historic fact builds University Health's reputation and to be supported as they introduced the "biggest, most innovative cardiovascular service in the area, complete with state-of-the-art diagnostics, a renowned open-heart surgery program and dedicated Stroke Unit" which recently opened in 2007 (University Health, 2007). The Cardiovascular Center is a Blue Distinction Center for Cardiac Care of the Blue Cross Blue Shield Association.

MCG includes a 478-bed adult hospital, that includes an Ambulatory Care Center with more than 80 outpatient clinics and a Specialized Care Center housing a 13-county Level I regional trauma center (Medical College of Georgia, 2008). MCG also includes a variety of dedicated centers and units and more than 90 satellite clinics (Medical College of Georgia, 2008). The cardiovascular service at MCG includes the same services at University Hospital but touts a competitive advantage over other hospitals in the area with having a cardiac physician on duty at the hospital 24 hours a day (Medical College of Georgia Cardiovascular services, 2008).

Doctor's Hospital is a HealthCare of America facility most noted for being the premier burn center. Cardiac services are available but limited to cardiac catheterization

lab procedures to include pacemaker and defibrillator implant, ablation procedures and cardioversion (Doctor's Hospital, 2008). The last hospital in the area, Trinity Hospital, also offers a catheterization laboratory, but does not provide cardiothoracic surgery (Trinity Hospital, 2008).

Internal Environment

The analysis of the internal environment allows questioning what the CT program, DDEAMC, and the Augusta VAMC can do to create a competitive advantage. A value chain approach (see appendix D) was used to evaluate various ways DDEAMC and the Augusta VAMC can create value and subsequently a competitive advantage in the CT program.

The value chain consists of three activities of service delivery shown in the top three boxes. Service deliveries are activities that are directly involved in ensuring access to, provision of, and follow-up for health services (Swayne, Duncan & Ginter, 2006). The first, pre-service, include specific activities that facilitate customer entry into the program. The second, point- of-service, include activities that ensure the delivery of care. The third component, after-service, is those activities that create value after the patient has received the services. Support activities are those things in the value chain that are designed to aid in the efficient and effective delivery of health services (Swayne, Duncan & Ginter, 2006). Refer to appendix D for detail of each section as it applies to the CT program.

DDEAMC is the regional medical center for the Southeast Regional Medical Command (SERMC) and located on Fort Gordon, Georgia. The SERMC has 11 medical treatment facilities (MTFs) within its area of responsibility (AOR) to include: DDEAMC,

Augusta, Georgia; Moncrief Army Community Hospital, Columbia, South Carolina; Martin Army Community Hospital, Columbus, GA; Winn Army Community Hospital, Hinesville, GA; Rodriguez Army Health Clinic, Puerto Rico; Blanchfield Army Community Hospital, Clarksville, TN; Lawrence Joel Army Health Clinic, Atlanta, GA; Fox Army Health Center, Huntsville, AL; Lyster Army Community Hospital, Dothan, AL; Camp Shelby, Hattiesburg, MS, and SouthCom Clinic, Miami, FL.

Beneficiaries within these areas are categorized by care choice or Tricare plan; Tricare Prime, Tricare Standard, Tricare Extra, Tricare For Life, Tricare for Reserves, Tricare Prime Remote, and Tricare Overseas options for those beneficiaries stationed or living outside the United States (Tricare, 2007). Active duty members are restricted to participation in Tricare Prime. All other beneficiaries have choices based on their location and preference. Only Tricare Prime beneficiaries are required to secure a statement of non-availability before seeking specialty cardiology care outside the network, although an MTF may have right of first refusal (ROFR) (Humana Military Healthcare Services, 2007).

Cardiac Services include both cardiology and cardiothoracic specialty care at DDEAMC. Cardiology procedures are inclusive of the following procedures: 12-Lead electrocardiogram, 24-hour holter monitoring, pacemaker clinic, event monitoring, echocardiography, transesophageal echocardiogram, agitated saline contrast echocardiogram, stress testing, traditional exercise stress test, nuclear stress test, echocardiogram stress test, tilt table testing, coumadin clinic, cardiac ultrasound, and procedures within the cardiac catheterization laboratory. Cardiothoracic surgery procedures include open heart procedures that require use of a bypass pump. Cardiac

Services at the Augusta VAMC also include the same procedures minus cardiothoracic surgery. Patients undergoing interventional and diagnostic procedures at both institutions are further referred, depending on condition to the cardiothoracic surgery team for further evaluation.

With heart disease being a significant concern within the national, state and local levels, it is natural for the Military Health System to take measures to meet the needs of their beneficiaries. At DDEAMC, two board certified cardiothoracic surgeons are on staff to provide immediate internal consults and can also render physician to physician consults by phone (personal communication, D. Eastman, August 1, 2007). This real-time approach has been an immediate step to encourage DDEAMC and local network physicians to contact DDEAMC CT Surgeons and to increase awareness of the program.

Legal and administrative issues were seen in the consult process with Humana, the Tricare contractor for region South. Tricare Standard beneficiaries referred for cardiology were being told they were not eligible for care in the specialty clinics at DDEAMC. This creates confusion within our target population and must be addressed.

Directional Strategies

The mission of the Military Health System (MHS) is to provide optimal Health Services in support of our nation's military mission—anytime, anywhere (Military Health System, 2008). At DDEAMC, the mission is to provide and promote readiness, health and training with the vision of being recognized as the premier integrated system of choice in health, readiness, and education for their patients, staff, and military families (Dwight D. Eisenhower Army Medical Center, 2008). DDEAMC values dignity,

dedication, and honor, providing support to the recent emphasis on patient-centered care. Strategic goals are patient centric, with individual teams concentrating on established initiatives such as access to care, education, customer service, wounded warrior program and Relative Value Unit (RVU) optimization.

The mission statement for the Veteran's Affairs is a quote taken from Abraham Lincoln's Second Inaugural Address, "*To care for him who shall have borne the battle and for his widow and his orphan.*" According to the VA website located at <http://www.va.gov>, the mission statement provides the focus for operations and guides the goals of the organization. Goals include caring for the welfare of the veteran enabled by delivering world-class service to veterans and their families by applying sound business principles that result in effective management of people, communications, technology, and governance (Veteran's Affairs, 2006).

The Veteran's Health Administration (VHA) has a distinct mission and vision statement that is congruent with the overall mission of the VA. The VHA mission is, "to serve the needs of America's veterans by providing primary care, specialized care, and related medical and social support services. To accomplish this mission, VHA needs to be a comprehensive, integrated healthcare system that provides excellence in health care value, excellence in service as defined by its customers, and excellence in education and research, and needs to be an organization characterized by exceptional accountability and by being an employer of choice (Veteran's Affairs, 2006). VISN 7 promises the following three things as their mission: 1) To provide care, second to none – best care anywhere; 2) To maintain and expand veteran's health care services; and 3) For every

veteran to be personally satisfied with the care that they receive from [the VISN 7], based on the outcome.

Finally, according to the Veteran's Affairs at the Augusta VAMC (Veteran's Affairs, 2006), they want, "to do all that we can for our veterans." All three mission statements from the VA stress providing care for their veteran population with the overall VA mission mentioning comprehensive integrated health care. VISN 7's mission is notable for wishing to maintain and expand care, and on a local level, the Augusta VAMC appears to be willing to expand their abilities to meet the needs of their customer.

Neither DDEAMC nor the Augusta VAMC have immediate plans to alter their mission, vision or goals as they best represent the current DoD culture. Both DDEAMC and the Augusta VAMC have broad enough visions to encompass any potential strategy for the CT program. Also, with the renewed emphasis on the Army Family, providing the best care is top priority.

Potential Strategies

To understand potential strategies available to DDEAMC and Augusta VAMC, a SWOT analysis was completed to clearly identify strengths, weaknesses, opportunities and threats to the CT program (see Table 1. CT program SWOT analysis). A SWOT analysis is a powerful technique for identifying key criteria and issues during a situation analysis (Lai & Rivera, 2006). The SWOT tool then divides the elements into controllable (internal) variables identified as the strengths and weaknesses, and non-controllable (external) variables identified as opportunities and threats (Lai & Rivera, 2006).

The SWOT analysis concentrates on factors contributing to the functioning of the CT program and characteristics of DDEAMC that specifically affect the program.

Limited information from Augusta VAMC was volunteered to add to the analysis. A refinement of the SWOT will be seen later as elements of the TOWS matrix.

Table 1.

CT program SWOT analysis.

<p>Strengths</p> <ul style="list-style-type: none"> • Strong dedication to serving the beneficiary population. • Stable civilian cardiology and cardiothoracic surgery department ancillary staff. • Available cardiology diagnostic testing abilities. • Excess capacity allowing immediately available cardiology and cardiothoracic physicians. • High patient satisfaction with both the cardiology and cardiothoracic departments. • Board certified physicians. 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Lack of continuity. • Potential non-replacement of military cardiologists and cardiothoracic surgeons due to personnel leaving the military. • Lack of marketing resources. • Distance from facilities in catchment area of DDEAMC and VISN7 to Augusta, GA. • Portability of medical record from network provider to military provider.
<p>Opportunities</p> <ul style="list-style-type: none"> • Large population of potential patients. • Accessible network physician population. • Increasing number of beneficiaries in the over 65 age group. • Many active senior (over 65) groups and organization in local and catchment areas. 	<p>Threats</p> <ul style="list-style-type: none"> • Shifting support to changing priorities at DDEAMC and Augusta VAMC based on external mission requirements. • Multi-step referral process into the cardiology and cardiothoracic surgery departments. • Turnover of referring physicians. • Migration of Tricare beneficiaries to Tricare Standard. • Marketing efforts of local hospitals creating a more visible presence.

Strengths and Weaknesses

The mission of DDEAMC and the Augusta VAMC are synchronous in their individual quests for optimal care delivery, which present opportunity for more collaborative ventures. Identified strengths of DDEAMC and in particular the CT and cardiology departments include: strong dedication to serving the beneficiary population, stable civilian ancillary staff and immediate availability of cardiologists and cardiothoracic surgeons. Strengths of the Augusta VAMC also include caring for the beneficiary population but substitute the potential rotating patient population of DDEAMC with a more stable market. Patients of the Augusta VAMC tend to have long-term ties to the Augusta community and are likely to remain in the area vice their military beneficiary counterparts.

An important strength at both facilities is full command support of VA/DoD sharing initiatives, with the CT program being no exception. The current strength of this relationship will only enhance efforts to maintain program viability. Future collaborative projects and support will be dependent on successive DDEAMC commanders.

Strengths of the CT program also include the availability of a full complement of cardiology diagnostic testing capabilities at both locations. Even more specific are the capabilities of other MTFs and VAMCs that do not have a cardiothoracic surgeon but still have rudimentary testing capabilities. Even the presence of electrocardiogram (EKG) technicians can be a source of testing crucial in identifying potential CT program candidates.

Additional strengths include a stable civilian cardiology and cardiothoracic surgery department ancillary staff at DDEAMC, high patient satisfaction with both

departments (according to the Army Provider Level Satisfaction Survey –APLSS)⁴, and a current excess capacity especially for the cardiothoracic surgeons. Without additional analysis, the stable ancillary staff may be an important variable for the resultant high customer satisfaction ratings.

Weaknesses in the CT program include Active Duty Army cardiologists and cardiothoracic surgeons that are deployable, with one cardiologist and one cardiothoracic surgeon currently in Iraq. Rotating personnel results in a lack of continuity. Also, with the ongoing war effort eroding the number of experienced physicians in the military, this weakness is projected to continue with a worse case scenario of no replacements being available. While the cardiothoracic consultant has determined that in order to maintain stable numbers at medical centers such as DDEAMC, this can only last as long as the pool of qualified physicians is stable.

The marketing department at DDEAMC is responsible for the overall marketing plan of the organization, to include both internal and external activities. Currently, only one person comprises the marketing department resulting in a severe lack of resources to dedicate to one particular project. However, while this is a weakness, the marketing director is committed to the success of the program and is willing to assist someone to explore marketing activities on their own. This is an important contribution, as the marketing director possesses an extensive contact network, especially for the senior groups and organizations in the local area.

Opportunities emerge from the changing environment (Jain, 2000). The external and internal environmental analyses revealed several opportunities to explore strategic options. The local beneficiary population for both the VA and DDEAMC remains a

⁴ APLSS database query conducted 1 August 2007. Database found at <https://otsg.synovate.com>.

valuable source for patients. While Tricare prime beneficiaries are easily accessible, Tricare Standard patients are not. It is not uncommon for beneficiaries to only be seen in by local physicians. No mechanism is in place to encourage Tricare Standard beneficiaries to utilize CT services at DDEAMC when such a need arises. The same holds true for people eligible for care at the Augusta VAMC but do not utilize these services due to insurance being provided by their employer or other reasons.

Opportunities for the CT program include the availability of a growing number of beneficiaries over the age of 65, accessible network physician population, and a large number of active senior (over 65) groups and organizations in the area.

Threats to the CT program include migration of Tricare prime beneficiaries to Tricare standard and receiving care in the community. This also allows beneficiaries access to the local hospitals for surgery. Marketing efforts of local physician groups and hospitals compounds this threat as beneficiaries may see these efforts as offering something better. Marketing departments at local facilities include an array of personnel dedicated to market research and market penetration. This is not available at DDEAMC or at the Augusta VAMC.

Priorities for both facilities change based on the environment both internal and external. While one of the current priorities is the success of the CT program, attentions may require to be shifted based on new information. While no indications suggest a shift as large as the machinations resulting from the Walter Reed incident, there are no guarantees that tomorrow may bring matters that are more pressing.

Another threat to the program is the multi-step referral process for internal physicians to send patients to either department. Unless an internal patient requires

immediate referral, the referring physician must submit an electronic referral, which is routed through the managed care department, and the Tricare service center. This process takes time that leaves the patient waiting for an answer. While waiting, the patient may have complications requiring immediate response at the nearest medical facility (which may not be a military facility).

The last identified threat to the CT program is the frequent turnover of referring physicians. Internally to DDEAMC, contract physicians can turnover at least once a year if not every six months. This is based on the longevity of the contract period, which does not exceed one year. Physicians may have the opportunity to complete another contract or leave for another opportunity. This creates a referring base that needs constant education on the referring process and the capabilities of the cardiology and cardiothoracic departments.

After thorough review of each element of the SWOT, the developing strategy will concentrate on the items shown in Table 2 (see table 2). Items deleted include the strengths and weaknesses that are common to all CT programs in direct competition, and items that are not approachable as part of this project.

From the information gathered from internal analyses, a strength and weakness analysis was compiled. This will help to determine potential competitive advantages to leverage in our final strategy, and illuminate weaknesses that can be overcome to add value to our customers. The strength analysis is shown in appendix E and weakness analysis in appendix F (see appendix E and appendix F). These will be further analyzed and discussed in the following sections.

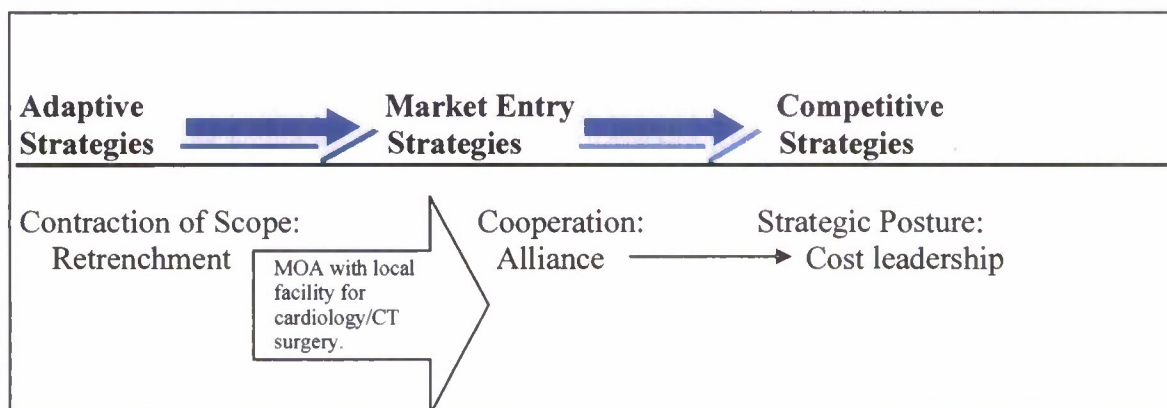
Table 2.

Critical Strengths and Weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> • Strong dedication to serving the beneficiary population. • Stable civilian cardiology and cardiothoracic surgery department ancillary staff. • Excess capacity allowing immediately available cardiology and cardiothoracic physicians. • High patient satisfaction with both the cardiology and cardiothoracic departments. 	<ul style="list-style-type: none"> • Lack of continuity. • Potential non-replacement of military cardiologists and cardiothoracic surgeons due to personnel leaving the military. • Lack of marketing resources. • Distance from facilities in catchment area of DDEAMC and VISN7 to Augusta, GA.

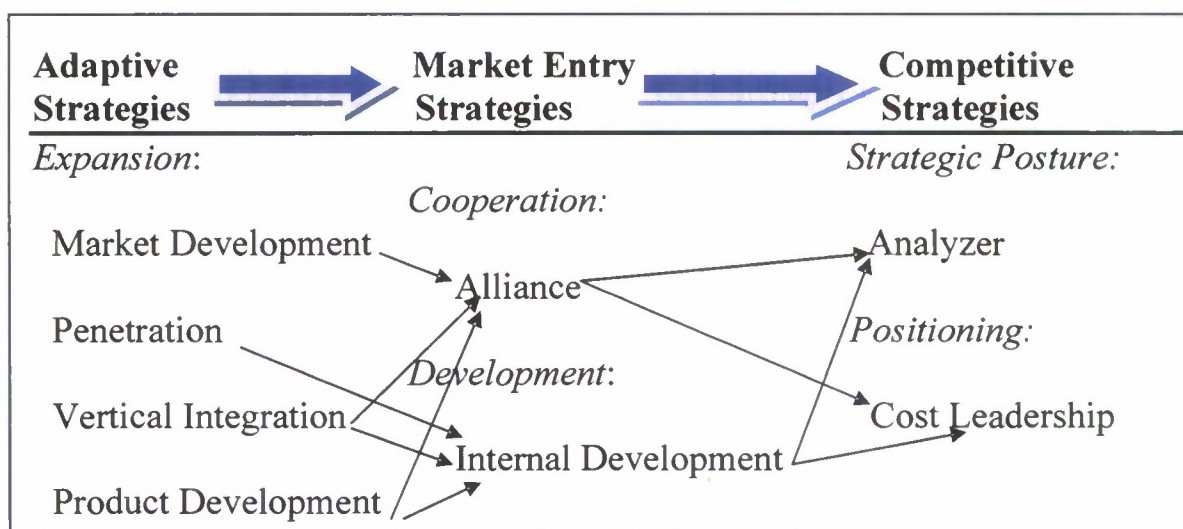
Strategy Map Options

Based on information in the first few sections, two strategic thinking maps were created in an effort to gain perspective and insight into the relationship between the organization and the environment (Swayne, Duncan & Ginter, 2006). The first map, shown in *figure 2*, displays a strategy of eliminating the program and referring all cardiology and/or cardiothoracic surgery to the network under a memorandum of agreement with a civilian entity. This may be a viable option if a make vs. buy financial analysis determines it as the most cost effective alternative.

Figure 2. Strategy Map option 1.

The second option (as shown in *figure 3*) encompasses a more internally active approach and would require additional capital to proceed. The adaptive strategy of expansion instead of contraction as shown in the first option would entail a detailed strategy and cooperation of all having an effect upon the CT program. Cooperation between DDEAMC and the Augusta VAMC would continue, but would require a marketing strategy to form between the facilities to reach more of their target market.

Figure 3. Strategic thinking map option 2.



The competitive strategies of each option include positioning as a cost leadership approach, but again, option 2 takes a more active approach and may perhaps leverage the approach under an analyzer posture. Option 1 suggests only competing on a no cost platform, while option 2 would consistently analyze the environment to adapt to the changing environment. To choose among the two options a more thorough analysis was conducted to understand the nature of each type of strategy.

Adaptive Strategies

To evaluate adaptive strategies options, two tools were utilized: the TOWS (threats, opportunities, weaknesses, strengths) matrix, and program evaluation. The TOWS matrix, as shown in appendix H is similar to the SWOT analysis but indicates four strategic conditions that the organization may encounter (Swayne, Duncan & Ginter, 2006, pg 286).

The TOWS matrix illustrates options as shown in each quadrant, based on the corresponding matrix interactions. The first quadrant to analyze is the survival quadrant. Based on the matrix interaction, retrenchment strategies are recommended to concentrate on the external threats and internal weaknesses. Retrenchment will allow refinement of the target market to create a standardized process to capture potential patients. This would decrease threats and aim marketing efforts to a fixed population.

The second quadrant, external fix-it, suggests four strategies to address external threats with internal strengths. Using market development, enhancement, vertical integration and product development, internal strengths can be manipulated to overcome some of the elements of the external threats. The third quadrant, internal fix-it, tackles internal weaknesses with external opportunities. Exploiting each opportunity by “fixing” internal issues will create value for both the potential customer and the organization.

The last quadrant, future quadrant, looks at internal strengths to take advantage of external opportunities. The strengths allow considerations for market development, market penetration, vertical integration and product development to meet each opportunity. For example, developing the customer service into a concierge service for

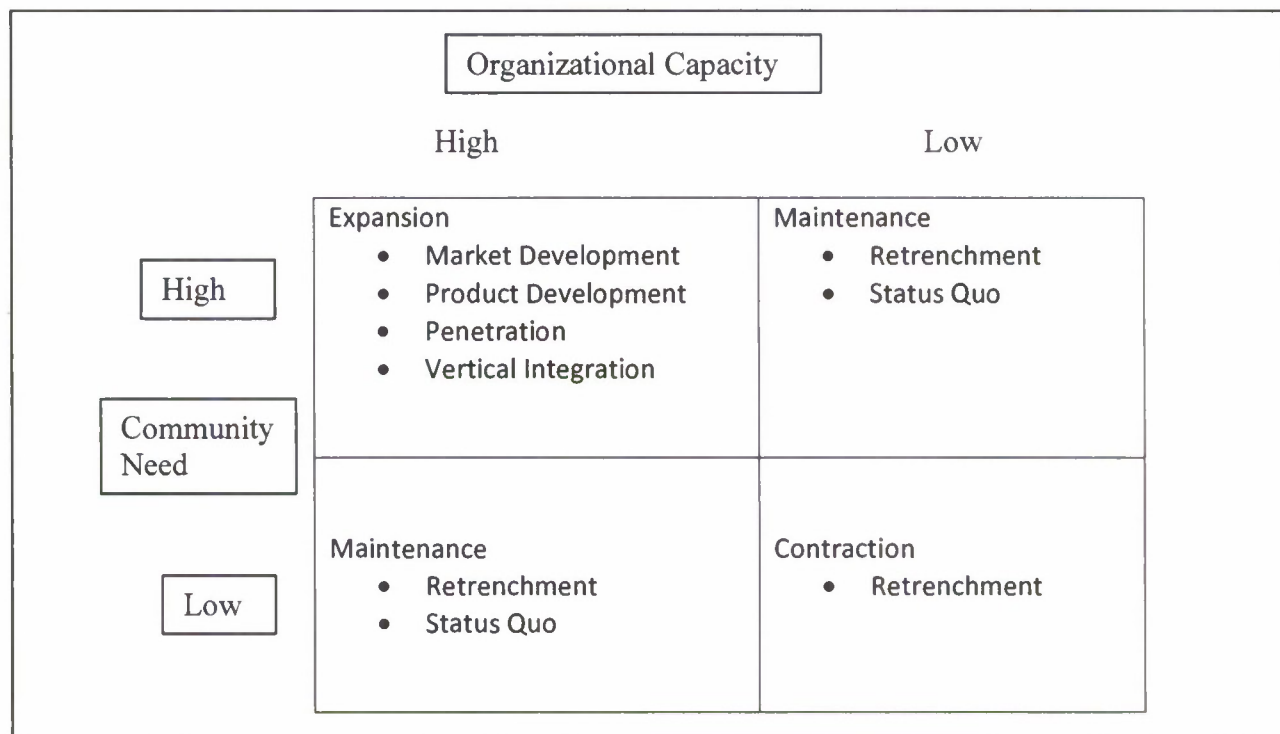
potential cardiology or CT patients could entice both patients and referring physicians to utilize the program.

The second adaptive strategy tool used, program evaluation, balances the use of the TOWS matrix, that includes strategies for market share capture. Program evaluation is useful in federal institutions where market share is not normally a concern (Swayne, Duncan, & Ginter, 2006, pg. 306). While market share is a great concern for the success of the CT program, program evaluation is still pertinent as it allows evaluation of organization capacity and community need. This is accomplished through the use of a needs/capacity assessment (see *figure 4*). The quadrants represent the interaction of community need and organizational capacity and subsequent strategies to address the interactions.

Community need is a function of community requirements (Swayne, Duncan & Ginter, pg. 308). In this case, the beneficiary population is the military and Veteran communities, which require an Army medical center to have specialty services available. Army medical centers, by definition, are to offer services or have agreements with local institutions, or have access to specialty services as though they are available at the MTF. Organizational capacity is the organization's ability to initiate, maintain, and enhance its set of adaptive strategy programs (Swayne, Duncan & Ginter, pg. 308).

The needs/capacity assessment illustrates the strategies to consider when organizational capacity is high and community need is high to be product and market development dependent. During times of low organizational capacity and high need, it may be a benefit of the program to concentrate efforts on a particular market. Likewise, when capacity is low and need is low or when capacity is high and need is low.

Figure 4. CT Program needs/capacity assessment.



Based on the adaptive strategy analysis, expansion is recommended and should be considered. If contraction of scope would be pursued, an opportunity to expand services to meet current and future need may be missed. The adaptive strategies of strategic option #2 would best serve the needs of both organizations as a joint sharing program already exists.

Market Entry Strategies

All of the expansion adaptive strategies require some activity to reach more consumers (Swayne, Duncan & Ginter, 2006, pg. 312). According to Swayne, Duncan & Ginter (2006), market entry strategies are developed by evaluating the external conditions, pertinent internal strengths and weakness and the goals of the organization.

Evaluation of the external conditions earlier included review of the stakeholder analysis (see figure 1), simple trend identification (see appendix A), and Porter's five forces (see appendix C) are explained in detail in relevant section.

For the first strategy option, a market entry strategy of forming an alliance with a local health care facility would strengthen the competitive advantage of the chosen facility. This may prove disadvantageous in more ways than losing this particular service. Beneficiaries sent to the allied facility may not want to return for other types of care and cause more migration to Tricare standard, and more retirees seeking care in their local communities.

The second strategy option boasts an alliance, but is a marketing alliance proposed for creating pre-service value. Internal development is also proposed through penetration of the existing market, developing the CT program into a one-stop service instead of two distinct departments. In addition, through vertically integrating existing physician practices into the referring habit of utilizing the CT program, it would decrease some of the confusion with the referral process.

Competitive Strategies

The internal competitively relevant strengths and weaknesses referred to a review of the SWOT analysis (see Table 1) and interactions within the TOWS matrix (see appendix G). Constrained resources would require a two-phase competitive strategy approach with the first phase directing efforts at correcting the weaknesses (Swayne, Duncan & Ginter, 2006, pg. 313). Thus, the second phase would be the implementation of the market entry strategies of merger, alliance, and internal development.

Selected Strategy

After careful consideration and strategic analysis, strategy option #2 was chosen to pursue. While a make-vs.-buy financial analysis could not be conducted, the executive committees of both institutions eliminated option #1 since it did not follow the mission, vision, and goals of the organization.

The selected strategy will allow market development not only for the CT program, but create visibility opportunities for both organizations. It will also reinforce the importance of the existing joint sharing agreement and the need for future refinement. The competitive strategy of the selected strategy may also promote market development opportunities in the current unpredictability of the environment.

Service Delivery Strategies

The selected service strategies that will be needed to support the selected strategy include an increased marketing effort to reach the target market of the over 65-age group for both DoD facilities. This will address pre-service needs of increasing awareness of the program, to include its capabilities and ease of access. A separate marketing effort will concentrate on informing referring physicians about: program capabilities and availability; and how to access the program.

The distance from the customer to DDEAMC or the Augusta VAMC may be problematic, but could be an opportunity if transportation was provided or assistance to the customer given on best travel and lodging accommodations. Existing transportation may also be available and not known. This option should be explored before creating additional transportation means.

Leveraging access to the many senior organizations will be a valuable and inexpensive venue to distribute marketing material and informing the target audience of the CT program. The retiree council based on Fort Gordon has been very helpful with past informational campaigns for DDEAMC and current relations remain good. If members of the retiree council are also members of other local organizations, it would be beneficial for DDEAMC to approach them first for marketing assistance to spread the word about the CT program.

At the point-of-service, it will be important to maintain high customer satisfaction. Customer service is important to staff members at all levels and at both facilities and will continue to be monitored. Careful consideration will need to be taken as the number of program customers increases, to ensure no one position is feeling pressure or high levels of stress that may impact optimal customer service. In addition, having a mechanism in place to appropriately track VA customers being seen at DDEAMC will need to be developed to ensure continuity of care. This should include transfer of records and following up with the customer's primary care provider. These activities are to also be included in after service activities.

After-service activities include entering the customer into a database which will generate a reminder to contact the customer at specified intervals for follow-up. Follow-up activities may include diagnostic testing, anticoagulant counseling, dietary counseling, or evaluation of new symptoms.

Support Delivery Strategies

The culture of both facilities already supports taking care of the beneficiary population. Continued support will be required if adjustments in the selected strategy are

needed. Preparation of the executive committees from each facility for adjustments that may be needed throughout the strategy implementation process should be completed. Unforeseen complications commonly exist in any well-derived plan but knowing adjustment may be needed is important to react quickly.

Support with the organizational structure is necessary to maintain continuity and subsequent customer satisfaction. Current cardiologists are scheduled for six-month deployments each year. With three out of the five cardiologists being military, this is a severe disadvantage from the local providers. If military physicians cannot be stabilized, perhaps the addition of civilian cardiologists should be considered.

Strategic resources will be needed to support the selected strategy. Human resources, information technologies, and financing of marketing efforts and equipment will be necessary to be successful. Since continuity of care is currently an issue and the likelihood of stabilizing physician deployments is unlikely, then the addition of civilian providers should be considered.

Any increase in personnel will result in space requirements and as such a footprint of clinic operations for successful strategy implementation is required. Understanding clinic flow, physical limitations of customers and office space for providers should not be a second consideration after equipment location. A workflow map of optimal work conditions at maximum capacity should be completed before subsequent changes are made. Adjustments in workflow may be inclusive of the changes mentioned earlier that would need executive committee support.

Action Plan

After weighing the interactions of: the two involved facilities; analysis of the CT programs strengths, weaknesses, opportunities and threats; and securing the support of the executive committees, an action plan was formulated. The immediate directive is to increase the number of cardiothoracic surgeries to show the reviewing board that an action plan was being formulated and progress was being made. The first action identified was to identify the target market. As stated earlier, 1 in 4 people who died of cardiovascular disease in Georgia in 2005 were under age 65 (Georgia Department of Human Resources, 2007). While the long-term plan is to include the under 65 population in our target market, short-term goals only include the over-65 population, or three of the four people that die from cardiovascular disease.

The second task is to ensure the main feeder of customers, the cardiology clinic, had enough providers to perform diagnostic testing, such as cardiac catheterization, on any given day of the week. One cardiologist is currently scheduled to deploy and one is deployed. The gap will equal at least one month. Fortunately, this month will occur as the marketing plan is being launched. As there is a lag between marketing and benefit seen, the one- month time frame will be inconsequential. In order to build continuity, it was determined that one civilian full-time cardiologist would be needed. The necessary paperwork would need to be submitted and a cardiologist hired.

Personnel in the cardiothoracic clinic are currently stable although the chief is scheduled to retire. The Army cardiothoracic consultant has assured the executive committee that the position would be filled and replacement set to arrive soon after. The

second cardiothoracic surgeon, also an Army asset has been mentored by the outgoing chief and is knowledgeable of duties for CT program maintenance.

Additional personnel are needed to form a recommended concierge service to be based in the cardiology clinic. The concierge service will add tremendous value by forming the following: a one-stop shop to market services to meet with groups and organizations within the target market; arrange transportation and lodging for out of area customers; and maintain visibility of customers and design a follow-up system. In addition, the concierge service should: keep contact with area and referring physicians; facilitate medical record transfer; act as a liaison service between the Augusta VAMC and DDEAMC; and offer the customer and physicians one overall place for information regarding the CT program. One registered nurse, one nurse practitioner and one administrative assistant will need to be hired to begin building the service.

The concierge service is also one strategy that addresses most of the programs weaknesses by capitalizing on their strengths. Although military physicians may deploy which adds to the lack of continuity, the stable concierge service will be the customer's first contact and their last. The relationship will be continuous with the service. In addition, the service will alleviate frustrations customers may experience when trying to procure or transfer their medical records.

This action plan was presented to the executive committees of both facilities and agreed upon through a memorandum of agreement (see Appendix H). Each facility will support the plan in the manner presented and track success by the number of cardiothoracic surgery cases each month. The plan was immediately executed.

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Appendix A. External environmental analysis

Scanning

1. Political
 - a. Treatment modalities and reimbursement mandated by Health Affairs policy.
 - b. Encouragement of existing Joint Resource Sharing program between MHS and VA.
 - c. Marketing significant portion of civilian healthcare strategy.
2. Social/Cultural
 - a. Continuity of care offered by civilian healthcare providers.
 - b. Customer satisfaction part of business strategy for civilian providers.
3. Technology – (take out hyphen)
 - a. Civilian healthcare experimenting with improved prosthetics and ventricular assist devices.
 - b. Trials of new computer-enhanced modalities for imaging, instrumentation, and robotics.
 - c. Clinical trials of new valve repair techniques.
4. Economic
 - a. Local Augusta area is economically stable at present. Various Tricare programs available for those wishing willing to pay some money out of pocket to those not wanting to pay any out of pocket healthcare expense.
5. Legal
 - a. Civilian healthcare may not require specialty approval from PCM. May not have same restrictive Right of First Refusal option as the MHS.
6. Influence of suppliers
 - a. Durable and nondurable goods bought per stringent purchase agreements.

Monitoring

1. Current trends
 - a. Less invasive treatment options have proven successful, decreasing the need for open-heart procedures.
 - b. Customer service influencing employee bonuses, incentive for service excellence.
 - c. New technology and treatment modalities continue to surface.
 - d. National economic threat of recession may influence beneficiary's ability to pay co-payments, and/or keep secondary health insurance.

Forecast

1. New technology for treatment of cardio-pulmonary continues to include medication, diet, and exercise combinations as part of an overall disease management program.
2. Prolonged war has increased the number of military personnel retiring.
3. Life span may increase due to continuing improvements in medical interventions.
4. Healthy lifestyles promoted, to include decreasing the risk factors that cause heart disease.

Assessing

1. Current technologies adopted by civilian healthcare not adopted until much later by MHS.
2. Cardiac disease is a lifelong condition. Civilian providers may better provide the continuity of care that satisfied patients have with established providers.

Appendix B. Area maps.

Figure 1. Area map of Augusta, GA.

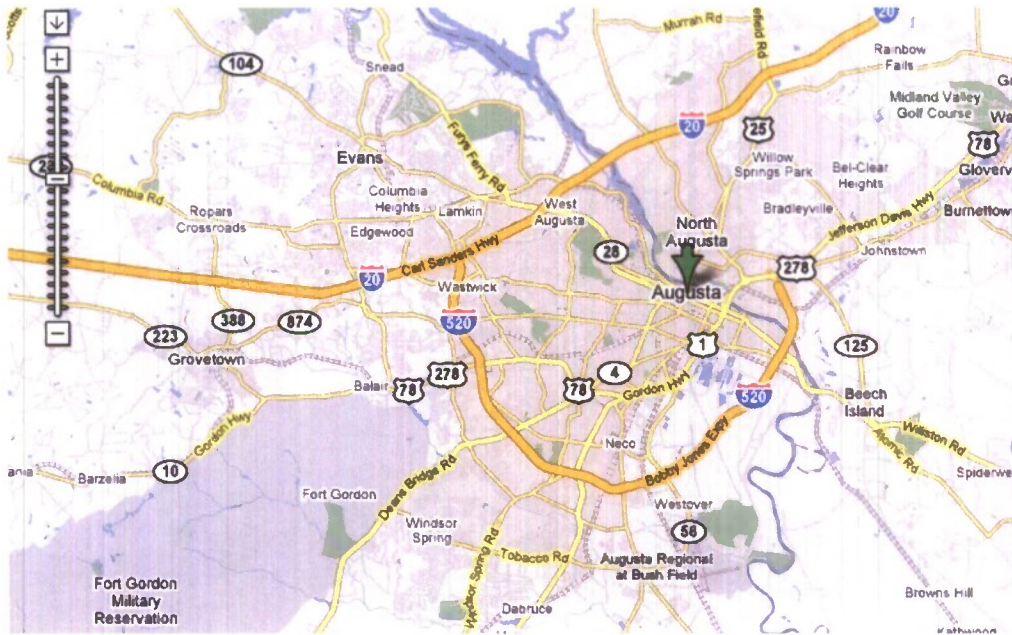


Figure 2. Southeast Region Medical Command service area.

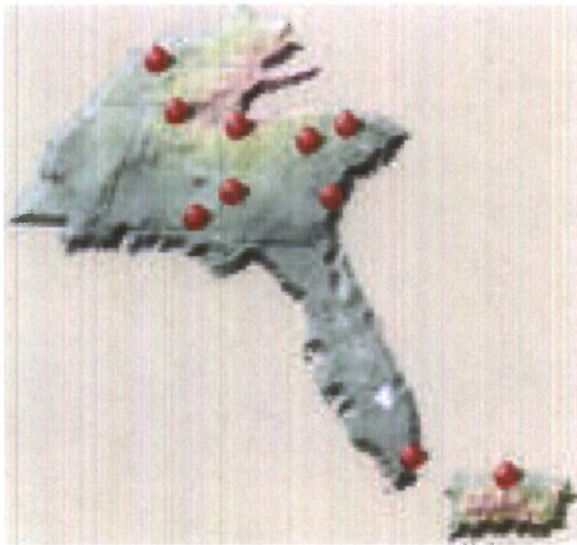


Figure 3. VISN 7 service area.



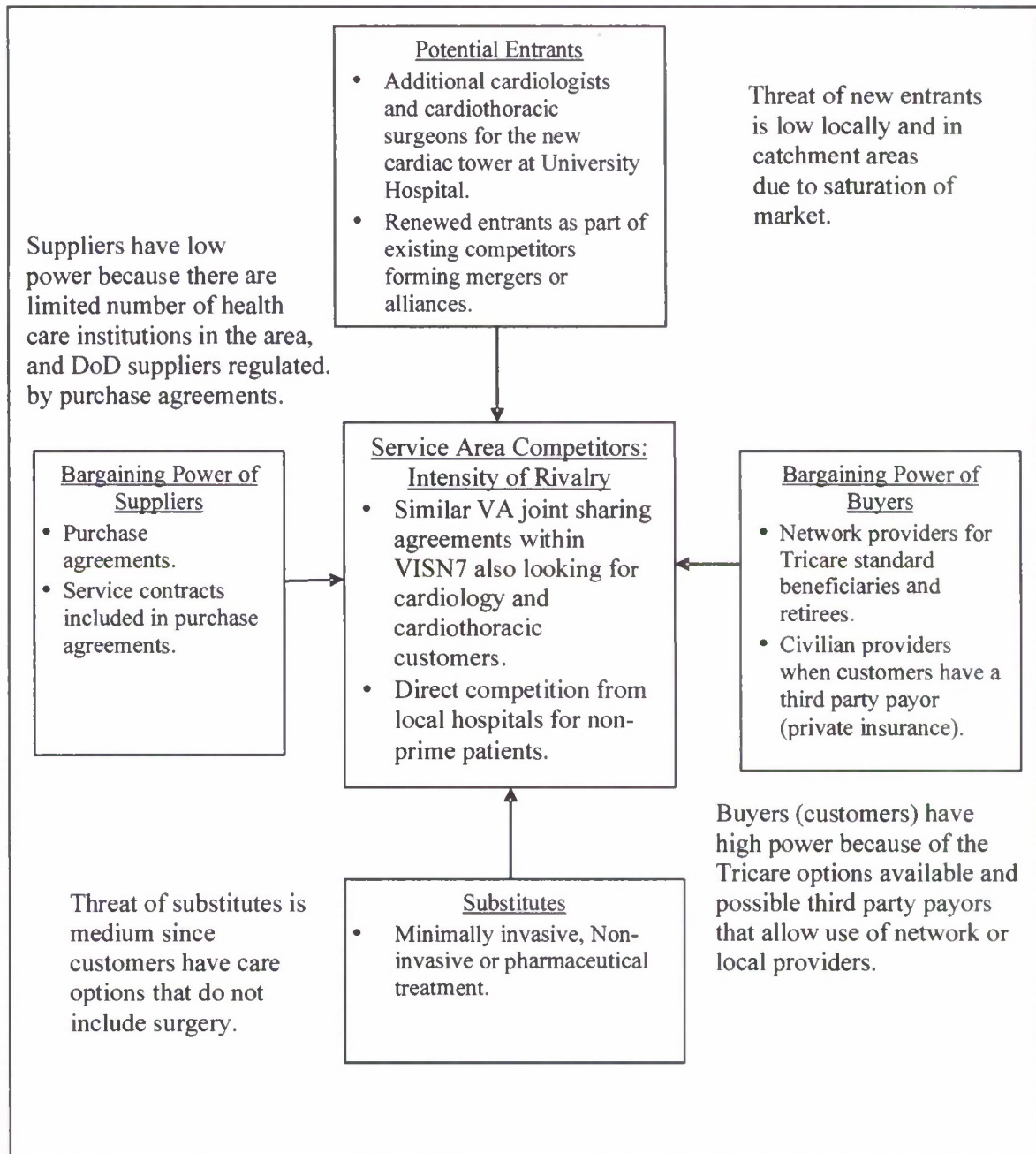
VA Southeast Network Medical Centers

Alabama	Georgia	South Carolina
Birmingham VAMC	Atlanta VAMC	Ralph H. Johnson VAMC (Charleston)
Central Alabama Health Care System - Charlie Norwood VAMC (Augusta)		Wm. Jennings Bryan Dorn VAMC (Columbia)
East	Carl Vinson VAMC (Dublin)	
Central Alabama Health Care System - West		
Tuscaloosa VAMC		

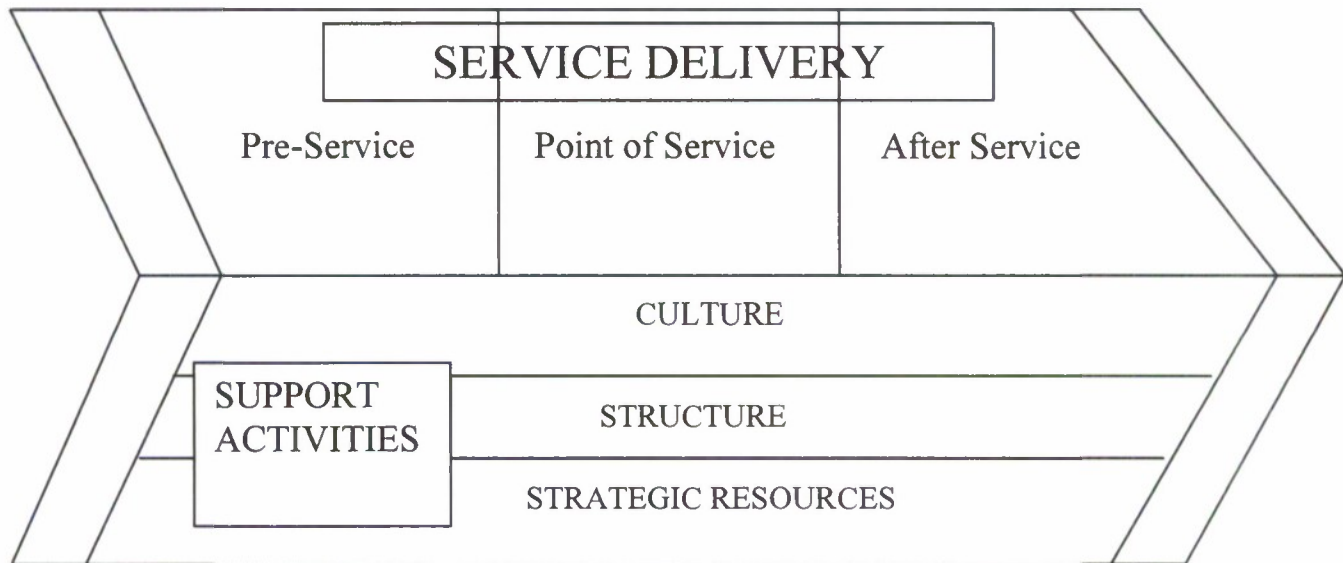
VA Southeast Network Clinics

Alabama	Georgia	South Carolina
Bessemer	Albany	Savannah
Dothan	Athens	Anderson County
Florence Shoals (Sheffield)	Columbus	Beaufort
Gadsden	Decatur	Florence
Huntsville	East Point	Goose Creek (North Charleston)
Jasper	Lawrenceville	Greenville
Madison/Decatur	Macon	Myrtle Beach
Anniston/Oxford	NE Georgia/Oakwood	Orangeburg County
		Rock Hill

Appendix C. Porter's five forces analysis of the cardiothoracic surgery program.



Appendix D. Value chain/strategic thinking map for discovering competitive advantages and disadvantages of the CT program/DDEAMC/Augusta VAMC.



Service Delivery

Pre-Service:

Strengths: Strong dedication to service.

Weaknesses: No marketing campaigns to reach target population. Cumbersome referral process. Distance to DDEAMC or the Augusta VAMC.

Point-of-Service:

Strengths: Immediate access to physicians. Excess capacity. Board certified physicians.

High patient satisfaction with cardiology and cardiothoracic surgery departments.

Weaknesses: Medical records may not be present during initial appointment.

After Service:

Strengths: Call backs to patients to check health status. Physician to physician follow-up.

Weaknesses: Follow-up services haphazard and depends on availability of staff.

Support Activities

Culture:

Strengths: Strong dedication to serving the DoD beneficiary population. Stable civilian ancillary staff. High patient satisfaction with cardiology and cardiothoracic department staff.

Weaknesses: Deployment of military personnel/physicians.

Organizational Structure:

Strengths: No cost for care to beneficiaries.

Weaknesses: Lack of continuity with providers. Cumbersome referral process. Tricare program options. Portability of medical records from network providers to DoD providers.

Strategic Resources:

Strengths: Existing joint sharing agreement between DDEAMC and the Augusta VAMC.

Weaknesses: Potential non-replacement of military cardiologists and/or cardiothoracic surgeons. Lack of emphasis on marketing resources and overall marketing plan.

Appendix E. CT Program, DDEAMC and Augusta VAMC Analysis: Strengths

	STRENGTH	Value of Strength	Is it rare?	Imitatability	Sustainable	How much Competitive Advantage does it provide?	Implications
		High/Low	Yes/No	Easy/Difficult	Yes/No		
1	Strong dedication to serving the DoD beneficiary population	H	N	D	Y	High – long term	Bet the organization on this strength
2	Stable civilian cardiology and cardiothoracic surgery department civilian staff	H	N	E	Y	Moderate, if not maintained, a disadvantage	Source of long-term competitive advantage as the stability brings historical knowledge and network.
3	Excess capacity at allowing immediate access to cardiology and cardiothoracic physicians at DDEAMC.	H	Y	N	N	High in short term, can be disadvantage if no longer able to be immediately available	Only a short-term competitive advantage. The capacity will decrease as more customers increase.
4	Quality -Well trained staff and latest equipment	H	N	D	Y	Marginal	Not a source of long-term competitive advantage.
5	High patient satisfaction with both the cardiology and cardiothoracic department staff	H	N	D	Y	None, if not maintained	Is a source of long-term competitive advantage as strong relationships are difficult to maintain.

Appendix F. CT Program, DDEAMC and Augusta VAMC Analysis: Weaknesses

	WEAKNESS	Value	Common among competitors ?	Correctable	Can competitors sustain their advantage	Is it a disadvantage?	Implications
		High/Low	Yes/No	Easy/Difficult	Yes/No		
1	Lack of Continuity with DDEAMC providers	H	N	D	Y	Serious competitive disadvantage	Continuity is a predictor of customer service and should be addressed.
2	Potential non-replacement of military cardiologists and/or cardiothoracic surgeons due to personnel leaving military	H	N	D	Y	Serious potential competitive disadvantage	Without the necessary number of physicians, the program would end.
3	Only one marketing staff member each facility (DDEAMC and Augusta VAMC)	H	N	D	Y	Serious disadvantage	Lack of resources affect marketing efforts of program.
4	Distance from facilities in catchment area of DDEAMC and VISN7 to Augusta, GA	H	N	D	Y	Serious disadvantage	Customers more likely to utilize services close to them.
5	Portability of medical record from network provider to military provider.	H	N	D	Y	No serious disadvantage at this time	Competitive disadvantage since customers being seen at DoD facility must transfer medical records.
6	Tricare programs other than Tricare Prime are not bound to seeing DoD physicians or being seen in DoD facilities	H	Y	D	Y	Serious disadvantage	No mechanism to capture potential cases from non-Prime customers.

Appendix G. TOWS Matrix

<div data-bbox="479 342 565 585" style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 5px;">Internal Factors</div> <div data-bbox="248 629 544 700" style="border: 1px solid black; padding: 5px;">External Factors</div>	<p style="text-align: center;">Internal Strengths (competitive advantages)</p> <ol style="list-style-type: none"> 1. Immediate access to physicians. 2. Dedicated executive staffs. 3. Customer service of cardiology department and cardiothoracic surgeons. 4. Board certified physicians. 	<p style="text-align: center;">Internal Weaknesses (competitive disadvantages)</p> <ol style="list-style-type: none"> 1. Lack of continuity. 2. Lack of marketing resources. 3. Distance from facilities in catchment area of DDEAMC and VISN7 to Augusta. 4. Portability of medical record from network provider to military provider.
<p style="text-align: center;">Opportunities</p> <ol style="list-style-type: none"> 1. Large population of potential patients. 2. Accessible network physician population. 3. Increasing number of beneficiaries in over 65 age group. 4. Many active senior (over 65) groups in local and catchment areas. 	<p style="text-align: center;">Future Quadrant</p> <ul style="list-style-type: none"> • Market Development • Penetration • Vertical Integration • Product Development 	<p style="text-align: center;">Internal Fix-It Quadrant</p> <ul style="list-style-type: none"> • Market Development • Product Development • Enhancement • Retrenchment • Product Development • Vertical Integration
<p style="text-align: center;">Threats</p> <ol style="list-style-type: none"> 1. Shifting support to changing priorities at DDEAMC and Augusta VAMC based on external mission requirements. 2. Multi-step referral process into the cardiology and cardiothoracic surgery departments. 3. Turnover of referring physicians. 	<p style="text-align: center;">External Fix-It Quadrant</p> <ul style="list-style-type: none"> • Market Development • Enhancement • Forward Vertical Integration • Product Development 	<p style="text-align: center;">Survival Quadrant</p> <ul style="list-style-type: none"> • Retrenchment

Appendix H. Memorandum of agreement



DEPARTMENT OF THE ARMY
HEADQUARTERS DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905-6650

VA/DoD CARDIOVASCULAR ACTION PLAN AGREEMENT
BETWEEN
AUGUSTA VETERANS AFFAIRS MEDICAL CENTER
AND
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
AND
VETERANS INTEGRATED SERVICE NETWORK (VISN) 7
AND
SOUTHEAST REGIONAL MEDICAL COMMAND

SUBJECT: Cardiology and Cardiothoracic Services

1. The purpose of this action plan (AP) is to define mutually agreed upon actions to be taken by the Augusta Veterans Affairs Medical Center (VAMC), Dwight D. Eisenhower Army Medical Center (DDEAMC), Veterans Integrated Service Network (VISN) 7, and the Southeast Regional Medical Command (SERMC) in response to the April 19-20 Cardiac Surgery Program Site Visit Report (Enclosed) by Dr. Edward Sako. This AP specifically addresses Dr. Sako's recommendations with the expressed goals of meeting Augusta VAMC volume requirements for its Cardiac Surgery programs, removal of probationary status from the Augusta VAMC Cardiac Surgery program, and the sustainment of Cardiac Surgery services for DoD and Augusta VAMC beneficiaries by DoD providers in the Augusta area.

2. References. April 19-20 Cardiac Surgery Program Site Visit Report by Dr. Edward Sako. (Encl)

3. Responsibilities.

a. Augusta VAMC will:

- (1) Develop a policy to advise dual-beneficiary patients of cardiovascular services at DDEAMC and make timely referral of these beneficiaries when requested.
- (2) Develop a policy for Augusta VAMC patient referral to DDEAMC when the Augusta VAMC cannot accommodate local or regional cardiovascular referrals, within Augusta VAMC/Tricare access standards, due to nonavailability of inpatient beds or timely outpatient evaluation.
- (3) Develop an educational plan to target outlying clinics regarding available Augusta VAMC/DDEAMC cardiovascular services.
- (4) Optimize discharge planning and placement of patients in rehabilitation.
- (5) Streamline ASC bed management to increase throughput and bed availability for Cardiovascular cases.
- (6) Support the entry of cardiac case data into both the VAMC CICSP and the DDEAMC STS programs.
- (7) Further analyze demographic data within area of responsibility to forecast need for cardiac services.

b. DDEAMC will:

- (1) Make excess cardiovascular service capacity available to Augusta VAMC.
- (2) Develop Case Manager and Administrative Assistant positions in support of Cardiac Services program development and sustainment.
- (3) Ensure Cardiothoracic staffing by coordinating with consultant and ensuring backfill.
- (4) Establish SOP and dedicated line(s) for "one-call" phone line for cardiac services.
- (5) Establish/encourage mechanism for referrals to DDEAMC from region.
- (6) Develop a policy to refer cardiovascular services backlog to VAMC.
- (7) Send letter to Tricare Standard and 65 & over population to notify of services available.

(8) DDEAMC will direct Humana Military Healthcare Services (HMHS) to inform its Southern Region TRICARE Service Centers (TSCs), that Cardiology and Cardiothoracic services are available to DoD beneficiaries age 65 and over.

(9) Establish concierge package for regional patients.

(10) Create/submit requisitions to immediately fill cardiac services vacancies.

(11) Optimize discharge planning.

(12) Create a marketing plan designed to increase availability which will include:

- Brochures (provider and patient), Perpetual Signal article, Letter mail-out, local and regional retiree/veterans briefings, Retiree Appreciation Day, DDEAMC website, DDEAMC marquee, Tabletop displays in/out of DDEAMC, Physician road show offering CME's, Grand Rounds, network office visits, TSC sites.
- Visits to Dublin VAMC, Columbia VAMC and associated clinics.

(13) Support the entry of cardiac case data into both the VAMC CICSP and the DDEAMC STS programs.

c. VISN 7 will:

- (1) Reaffirm importance of and commitment to VA/DDEAMC cardiovascular program.
- (2) Improve referral patterns for cardiac surgery within the VISN to ensure efficiency and increase case volume within the cardiac surgery program.
- (3) Develop a policy for referring any regional backlog of cardiovascular cases to DDEAMC for immediate service.
- (4) Develop policy to refer dual-beneficiary patients to DDEAMC.
- (5) Develop policy for regional VA facilities to refer cardiovascular patients to DDEAMC when Augusta VAMC beds or timely outpatient evaluations are not available.

d. SERMC will:

- (1) Reaffirm importance of and commitment to VA/DDEAMC cardiovascular program.
- (2) Develop a policy to improve DoD referral patterns for cardiovascular care within the SERMC to ensure efficiency and increase case volume within the VA/DDEAMC cardiovascular program.
- (3) Support development of a policy for accepting regional VA patients when the Augusta VAMC cannot accommodate local or regional cardiovascular referrals due to nonavailability of inpatient beds or timely outpatient evaluation within Tricare/VA access standards.

4. This Action Plan is effective upon signature.


REBECCA WILEY

Director
Augusta VA Medical Center

8-28-07
(Date)


DONALD A. BRADSHAW

BG, Commanding
Dwight D. Eisenhower Army Medical Center and
Southeast Regional Medical Command

28 August 2007
(Date)


LAWRENCE A. BIRO

Network Director
VA Southeast Network (VISN 7)

28 August 07
(Date)